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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/173,828	10/16/1998	JESUS VAZQUEZ		4682

7590
JESUS VAZQUEZ
C/ALAMEDA B-13
STA JUANITA
BAYAMON, 00956
PUERTO RICO

12/29/2003

EXAMINER

KOCZO JR, MICHAEL

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 12/29/2003

33

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/173,828

Applicant(s)

VAZQUEZ, JESUS

Examiner

Michael Koczo, Jr.

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claims 42 to 62 are objected to because of the following informalities:

Each occurrence of "toroid" should read --toroidal--. See claim 42, line 3, for example.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 42 to 62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 42 and 62, the expression "top seal point" is not structurally meaningful because the each piston seals with the cylinder over an arc of more than 180 degrees during its motion, not just at one point.

In claim 42, line 3 from the bottom, there is no reference frame to give meaning to "downstream". Relative to what structure is the exhaust port located downstream of?

In claim 46, there is no reference frame to give meaning to "reversed horizontally". In line 5, there is no antecedent basis for "the slope of said approaching pistons". Furthermore, "approaching pistons" should read --at least one approaching piston--. In line 7, there is no

Art Unit: 3746

reference frame to give meaning to "upstream". Relative to what structure is the exhaust port located upstream of?

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 42 to 62 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to clearly describe the structure of the valve 67 which would enable it to seal between the cylinder, rotor and piston as the valve moves from a radially outermost position to allow passage of the piston, to a radially inner position where it contacts the rotor after the piston has passed.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 42 to 62 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

As can be seen from the attached exhibits, it is not possible to seal a toroidal cylinder with a swinging pivoted vane.

Art Unit: 3746

If the vane extends over an arc of 180 degrees as shown in exhibit "A", then it is clear that it cannot drop radially inwardly to seal against the rotor because of the narrowing sidewalls of the toroidal cylinder. This would render the device inoperative.

In the vane extends over an arc of less than 180 degrees as shown in exhibit "B", then it can be seen that it forms a substantial gap between the sides of the valve and the sides of the toroidal cylinder as it drops radially inwardly to seal against the rotor, thereby allowing the gas to leak around the valve, thereby rendering the device inoperative.

Since the intended mode of operation of applicant's device appears to conflict with well known and accepted principles, the presumption of inoperativeness is so strong that very clear evidence is required to overcome it. Therefore, applicant is required to submit a working model and/or affidavits from qualified, unbiased and disinterested persons who are familiar with the general principles involved in the operation of the device, attesting to its operativeness. A qualified person is one having an advanced degree in mechanical engineering from a leading university such as Stanford or the California Institute of Technology.

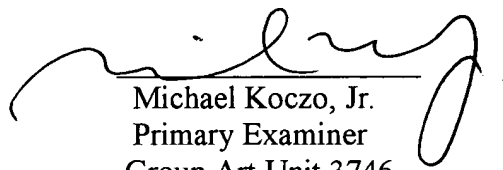
Conclusion

The prior art could not be applied to the claims due to their basis on a non-enabling disclosure.

Any inquiry relating to the status of this application or proceeding should be directed to the Customer Service Office whose telephone number is 703-306-5648.

Art Unit: 3746

Any inquiry relating to patent applications in general should be directed to the Patent Assistance Center at 1-800-786-9199.



Michael Koczo, Jr.
Primary Examiner
Group Art Unit 3746

M. Koczo, Jr./mnk
December 23, 2003
TEL 703-308-2630
M-F 7:30 to 16:00
FAX 703-872-9306
After Final FAX 703-872-9303